

In the Claims

1 – 73 (Cancelled)

74. (Currently Amended) A method of protecting a primary memory device, comprising the steps of:

- calculating a first signature of and from contents of the primary memory device comprising a verification of the contents of the primary memory device at a time the first signature is calculated;

- storing the calculated signature in a secondary memory device separate from the primary memory device;

- calculating a second signature of and from contents of the primary memory device comprising a verification of the primary memory device at a time the second signature is calculated;

- comparing the first signature to the second signature; and

- disconnecting the primary memory device from a control processor that operates based on instructions stored in the primary memory device if the first signature and the second signature do not match;

- wherein:

- the steps of calculating a first signature, storing, calculating a second signature, comparing, and disconnecting are performed independently of the control processor; and

- the secondary secure memory device is physically and operationally independent of the primary device.

75. (Currently Amended) The method according to Claim 74, further comprising ~~the~~ a step of maintaining stability of the control processor if the primary memory is disconnected from the control processor.

76. (Previously Presented) The method according to Claim 75, wherein the step of maintaining stability of the control processor comprises placing a

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predetermined pattern on a data bus path to the control processor that prevents the control processor from behaving erratically.

77. (Currently Amended) The method according to Claim 75, wherein the step of maintaining stability comprises placing a predefined pattern on the a data bus path ~~comprises switching the data bus path to a~~ wherein the predetermined pattern that causes the control processor to remain in a predetermined state.

78. (Currently Amended) The method according to Claim 74, wherein ~~the a~~ memory protection unit is configured to read the contents of the primary memory device as needed for calculation of the first and second signatures but operates independently of the primary memory device.

79. (Previously Presented) The method according to Claim 74, wherein the primary memory device comprises a program memory in a consumer interactive device.

80. (Previously Presented) The method according to Claim 79, wherein the consumer interactive device is a casino gaming apparatus.

81. (Currently Amended) The method according to Claim 79, wherein the consumer interactive device is an Automatic Teller Machine (ATM) machine.

82. (Previously Amended) The method according to Claim 79, wherein the consumer interactive device is a gaming machine and the method further comprising the step of communicating with a Remote Access Device (RAD) utilized to verify the memory contents by a floor agent according to gaming regulations.

83. (Previously Presented) The method according to Claim 82, wherein the RAD includes commands usable by the floor agent to disable the gaming machine.

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84. (Previously Presented) The method according to Claim 83, wherein the RAD is a portable battery powered device.

85. (Previously Amended) The method according to Claim 82, further comprising the step of communicating with the RAD via a bluetooth communication.

86. (Previously Amended) The method according to Claim 79, wherein the consumer interactive device is a casino style gaming machine and the method further comprises a verification of the memory unit to a check device external to the casino style gaming machine.

87. (Previously Amended) The method according to Claim 74, wherein the secondary memory device is not accessible by the control processor.

88. (Currently Amended) The method according to claim 74, wherein the secondary ~~secure~~ memory device module is only accessible by a microcontroller that is independent of the control processor.

89. (Previously Presented) The method according to Claim 76, wherein the predetermined pattern comprises a non-op instruction.

90. (Previously Amended) The method according to Claim 74, wherein the steps of calculating a first signature, storing, calculating a second signature, comparing, and disconnecting are performed by a microcontroller located in a memory socket in which the primary memory device is installed.

91. (Previously Presented) The method according to Claim 74, wherein the first and second signatures are calculated from the entire contents of the primary memory device.

92. (Currently Amended) A method of protecting a primary memory device, comprising the steps of:

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calculating a first signature of and from contents of the primary memory device comprising a verification of the contents of the primary memory device at a time the first signature is calculated;

storing the calculated signature in a secondary memory device separate from the primary memory device;

calculating a second signature of and from contents of the primary memory device comprising a verification of the contents of the primary memory device at a time the second signature is calculated;

comparing the first signature to the second signature;

disconnecting the primary memory device from a control processor that operates based on instructions stored in the primary memory device if the first signature and the second signature do not match;

wherein:

the steps of calculating a first signature, storing, calculating a second signature, comparing, and disconnecting are performed by a memory protection unit that operates independently of the control processor;

the secondary ~~secure~~ memory device ~~module~~ is not accessible by the control processor and is physically independent of the primary memory device;

the memory protection unit is configured to read the contents of the primary memory device as needed for calculation of the first and second signatures but operates independently of the primary memory device;

the primary memory device comprises a program memory in a consumer interactive casino gaming device;

the memory protection unit is further configured to communicate with a remote verification unit utilized to verify the memory contents by a floor agent according to gaming regulations;

the secondary ~~secure~~ memory device ~~module~~ is only accessible by the memory protection unit;

the memory protection unit is located in a memory socket in which the

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primary memory device is installed; and

the step of disconnecting comprises physically disconnecting the primary memory device from the control processor.

93. (Currently Amended) A method of protecting a program memory, comprising the steps of:

calculating a signature from contents of the program memory, the signature ~~comprising a signature of an image of binary content of the program memory~~ comprising a verification of the contents of the program memory;

comparing the calculated signature to a previous signature of contents of the program memory from a previously known state; and

preventing a control processor from accessing the program memory if the calculated signature does not match the previous signature;

wherein:

the steps of calculating, comparing, and preventing are performed by a memory test device;

the memory test device is operationally independent of the control processor and the program memory but is capable of accessing the program memory contents;

the step of preventing comprises maintaining control ~~device~~ processor stability by placing a predetermined pattern on a control bus to the control processor to prevent erratic behavior of the control processor; and

the memory test unit comprises a unit that communicates wirelessly with a Remote Access Device (RAD) used to verify a status of the program memory.

94. (Currently Amended) The method according to Claim 93, the Remote Access Device wireless unit is a ~~blue-tooth~~ bluetooth device.

95. (New) The method according to Claim 74, wherein the step of comparing is performed in a remote device.

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96. (New) The method according to Claim 74, wherein at least one step of the method is performed in a remote device.

97. (New) The method according to Claim 74, wherein at least one step of the method is initiated in a remote device.

98. (New) The method according to Claim 74, wherein:
the primary memory device is part of a gaming apparatus; and
the method is performed in conjunction with a remote monitoring unit.

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